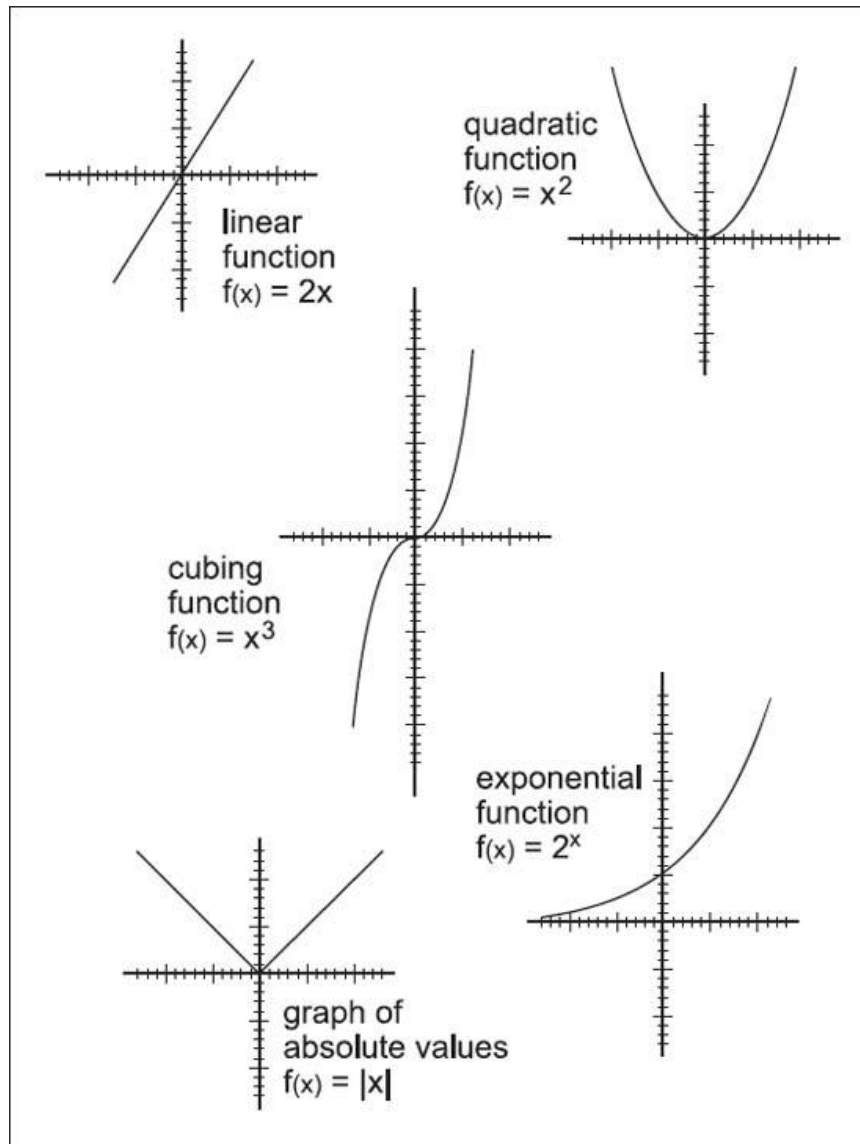


Graph Function



Question 1

- (a) Complete the following table for the equation $y = \frac{18}{x}$.

x	-4	-3	-2	-1	-0.5	1	1.5	2	3	4
y	-4.5	-6	-9	-18		18	12	9		4.5

- (b) For this part of the question, use graph paper. You may use a flexible curve rule. By using a scale of 2 cm to 1 unit on the x-axis and 2 cm to 5 units on the y-axis, draw the graph of $y = \frac{18}{x}$ for $-4 \leq x \leq 4$.
- (c) From your graph, find
- the value of y when $x = 3.4$,
 - the value of x when $y = -25$.

Question 2

- a) Complete Table 1 in the answer space for the equation $y = 2x^2 - 5x - 3$.
- b) For this part, use a graph paper.
By using a scale 2 cm to 1 unit on the x-axis and 2 cm to 5 units on the y-axis, draw the graph of $y = 2x^2 - 5x - 3$ for $-3 \leq x \leq 5$.
- c) From your graph, find
i) the value of y when $x = -2.4$,
ii) the value of x when $2x^2 - 5x - 3 = 0$.

X	-3	-2	-1	0	0.5	1	2	3	4	5
Y	30		4	-3		-6	-5	0	9	22

Table 1

Question 3

2. a) Complete Table 2 in the answer space for the equation $y = x^2 - 5x + 4$.
- b) For this part, use a graph paper.
By using a scale 2 cm to 1 unit on the x-axis and 2 cm to 5 units on the y-axis, draw the graph of $y = x^2 - 5x + 4$ for $0 \leq x \leq 8$.
- c) From your graph, find
a. the value of y when $x = 4.5$,
b. the value of x when $y = 21.75$

Answer:

a)

X	0	1	2	2.5	3	4	5	6	7	8
Y	4	0	-2		-2		4	10	18	28

Table 2

Question 4

- a) Complete Table 3 in the answer space for the equation $y = \frac{5}{x}$
- b) For this part, use a graph paper.
By using a scale 2 cm to 1 unit on the x-axis and 2 cm to 2 units on the y-axis, draw the graph of $y = \frac{5}{x}$ for $-5 \leq x \leq 5$.
- c) From your graph, find
a. the value of y when $x = 1.8$,
b. the value of x when $y = -6$.

Answer:

a)

X	-5	-3	-2	-1	-0.5	0.5	0.9	1.5	2.5	5
Y	-1	-1.7	-2.5		-10	10	5.6	3.3		1

Table 3

Question 5

Given the equation $y = 3x + 5$ draw the graph with the domain from $-4 \leq x \leq 4$

a) Construct table

b) Find the value when $x = 2.5$

Question 6

Given the equation $y = -x + 5$ draw the graph with the domain from $-4 \leq x \leq 4$

a) Construct table

b) Find the value when $x = 1.5$